

Amendments to the Claims:

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A compound with affinity to human P-selectin, which is a derivative of a peptide ~~or a functional equivalent of said peptide~~ represented by sequence $X(A_x)_mA_3A_1A_2A_1Y$, wherein:

- ~~-A₁ is a D- or L-cysteine (C), or a D- or L-valine (V), or an analogue thereof;~~
- ~~-A₂ is D- or L-aspartic acid (D), or an analogue thereof;~~
- ~~-A₃ is D- or L-phenylalanine (F), or a D- or L-tryptophan (W), or an analogue thereof;~~
- ~~-A_x is D- or L-amino acid, selected from the group consisting of glutamic acid (E), aspartic acid (D), glycine (G) and cysteine (C);~~
- ~~-X marks the N-terminal side of said sequence and is hydrogen or a residue comprising~~
comprises 1 to 6 D- or L-amino ~~acids~~ acid residues or analogues thereof;
- ~~-Y marks the C-terminal side of said sequence and is -OH or a residue comprising~~
comprises 1 to 11 D- or L-amino ~~acids~~ acid residues or analogues thereof;

wherein X and Y together may form a cyclic system;

characterized in that at least one X and Y or X+Y is substituted with the group $R^1-(Z)_n-$, wherein: -Z is selected from -CO-, -O-, -NR²-, and -CO-NR²- and wherein R¹ and R² are independently selected from:

a) ~~H~~;

~~b)~~ a) a (C₁-C₈)alkyl group;

~~c)~~ b) a (C₂-C₈)alkyl group, wherein at least one C-atom is replaced with a nitrogen, oxygen or sulphur atom;

~~d)~~c) a (C₆-C₁₄)aryl group, which may be substituted with at least one group selected from a halogen, (C₁-C₆)alkyl, -CF₃, -OH, -O-(C₁-C₆)alkyl, -COOH, -COO-(C₁-C₆-alkyl), -NO₂, -NH₂-, -NH-(C₁-C₆)alkyl, -N-((C₁-C₆)alkyl)₂ and -SO₃H;

~~e)~~d) a heteroaryl group which is selected from 5- or 6-membered ring systems and benzo-condensed ring systems, and has at least one heteroatom selected from the group consisting of nitrogen, oxygen and sulphur, wherein said heteroaryl group may be substituted with at least one group selected from the group consisting of a halogen, -(C₁-C₆)alkyl, -CF₃, -OH, -O-(C₁-C₆)alkyl, -COOH, -COO-(C₁-C₆)alkyl, -NO₂, -NH₂-, -NH-(C₁-C₆)alkyl, -N-((C₁-C₆)alkyl)₂ and -SO₃H;

~~f)~~e) an aralkyl group comprising an alkyl group as defined in a) or b) ~~or e)~~ and an aryl group or heteroaryl group as defined in c) or d) ~~or e)~~;

and wherein m and n are integers independently selected from 0 and 1, ~~with the proviso that n is not 0 when R¹ is H.~~

2. (Original) The compound according to claim 1, wherein A_x represents D- or L-glutamic acid (E) or D- or L- aspartic acid.
3. (Previously Presented) The compound according to claim 1, wherein A₁ represents D- or L-valine (V).
4. (Previously Presented) The compound according to claim 1, wherein A₃ is D- or L-tryptophan (W).
5. (Previously Presented) The compound according to claim 1, wherein Y is a residue comprising D- or L- lysine.
6. (Previously Presented) The compound according to claim 1, wherein R¹ is unsubstituted phenyl or phenyl substituted with at least one substituent as defined in claim 1.
7. (Currently Amended) The compound according to claim 1, wherein n is 0-1, Z is -CO-, and R¹ is 3,4,5-trihydroxyphenylcarbonyl or 3,5-dicarboxyphenylcarbonyl.

8. (Previously Presented) The compound according to claim 1, wherein X comprises no amino acids and Y comprises D- or L-lysine.
9. (Currently Amended) The compound as claimed in claim 8, wherein n is ~~0~~1, Z is ~~-CO-~~, and R¹ is 3,4,5-trihydroxyphenylcarbonyl or 3,5-dicarboxyphenylcarbonyl.
10. (Currently Amended) The compound of claim 1, wherein m is 0, wherein Z is -CO-, and wherein Z is attached to ~~Y~~X via a D- or L-glycine or aminobutyric acid spacer.
11. (Previously Presented) The compound according to claim 1, comprising a cyclic or constrained backbone structure.
12. (Currently Amended) A composition comprising one or more derivatives of the peptides ~~or functional equivalents thereof~~ according to claim 1.
- 13-17. (Canceled)
18. (Previously Presented) A pharmaceutical composition, comprising a compound according to claim 1 and one or more pharmaceutically acceptable carriers or excipients.
19. (Previously Presented) The pharmaceutical composition according to claim 18, which is formulated and processed for intravascular, intramuscular, subcutaneous or intralesional injection.
20. (Previously Presented) The pharmaceutical composition according to claim 18, which is formulated and processed in the form of a tablet, a capsule, granules, an enteric solid dosage form, a solid dosage form providing sustained or controlled release, or an orally disintegrating dosage form.
21. (Previously Presented) The pharmaceutical composition according to claim 18, which is formulated and processed for nasal, buccal, sublingual or vaginal administration.
22. (Previously Presented) The pharmaceutical composition according to claim 18, which is formulated and processed for pulmonary administration through a metered dose inhaler, a nebulizer, an aerosol spray dispenser, or a dry powder inhaler.
23. (Previously Presented) The pharmaceutical composition according to claim 18, further comprising a drug targeting agent and/or a bioavailability enhancing agent.

24-29. (Canceled)

30. (New) The compound according to claim 1, wherein m is 0, n is 1, R¹ is 3,4,5-trihydroxyphenyl, Z is -CO-, and wherein Z is attached to X via a D- or L-glycine or aminobutyric acid spacer.